

## Dynamic Design: Launch and Propulsion

## Launching Genesis: How Do You Spell Success?

### STUDENT ACTIVITY

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#### BACKGROUND INFORMATION

The Delta series of rockets have been a very successful launch vehicle since its first launch failed in 1960. In this activity you will determine the success rate of the Delta rocket.

#### PROCEDURE

- The chart below contains a record of launches the Delta rocket has made for every decade from 1960 to present. Use this chart to answer the questions that follow.

| Year       | Success | Failure | Success Rate |
|------------|---------|---------|--------------|
| 1960-1969  | 69      | 5       |              |
| 1970-1979  | 70      | 5       |              |
| 1980-1989  | 38      | 1       |              |
| 1990-1999  | 81      | 3       |              |
| 2000-2001* | 9       | 0       |              |

\* So far

- Calculate the success rate of the Delta rocket for each decade by filling in the last column in the table above.
- Which decade (ten-year period) had the greatest success rate for the Delta?
- Which decade had the lowest success rate for the Delta?
- Which decade had the most launches of the Delta?
- Calculate the success rate of the Delta rocket since 1960.



